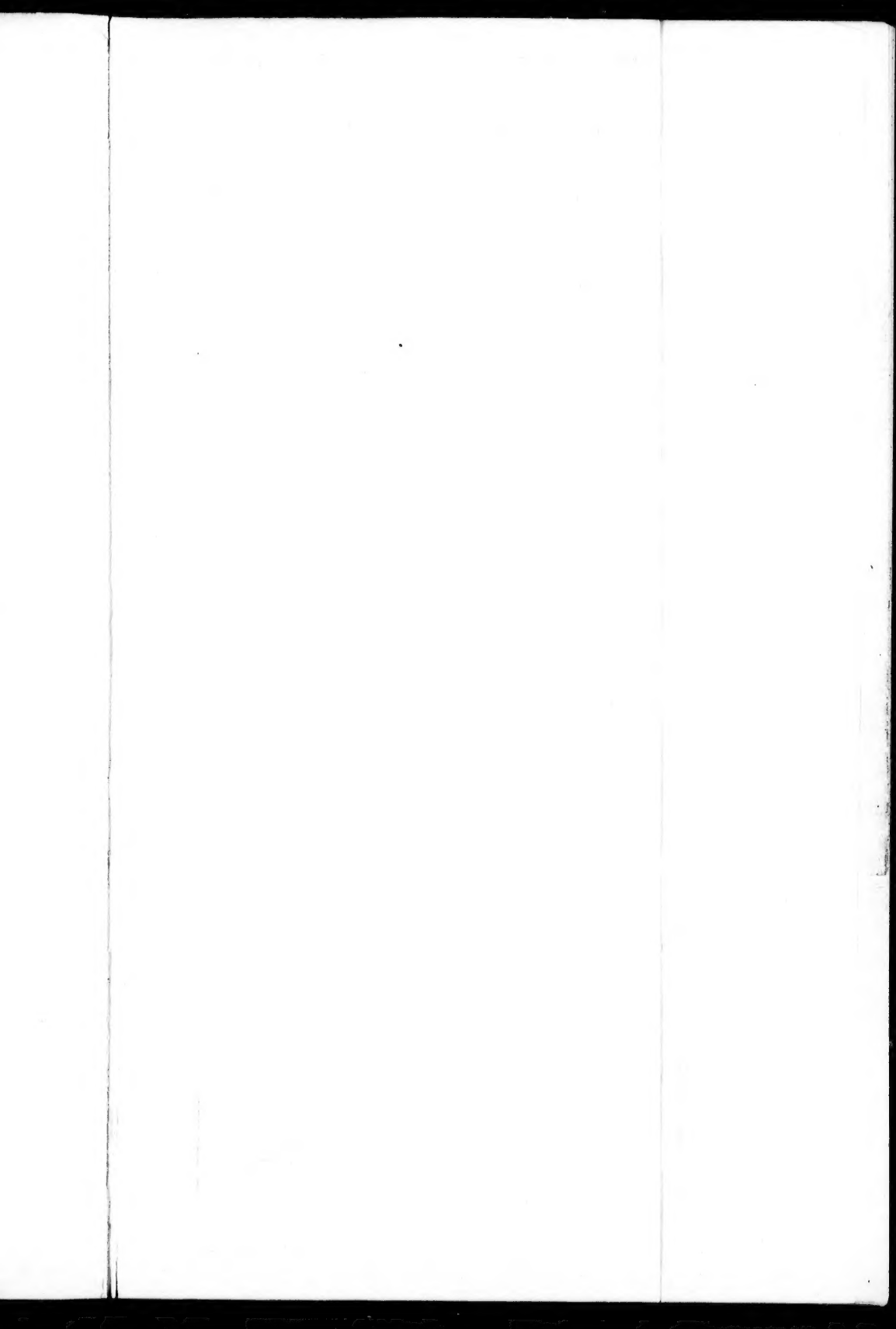
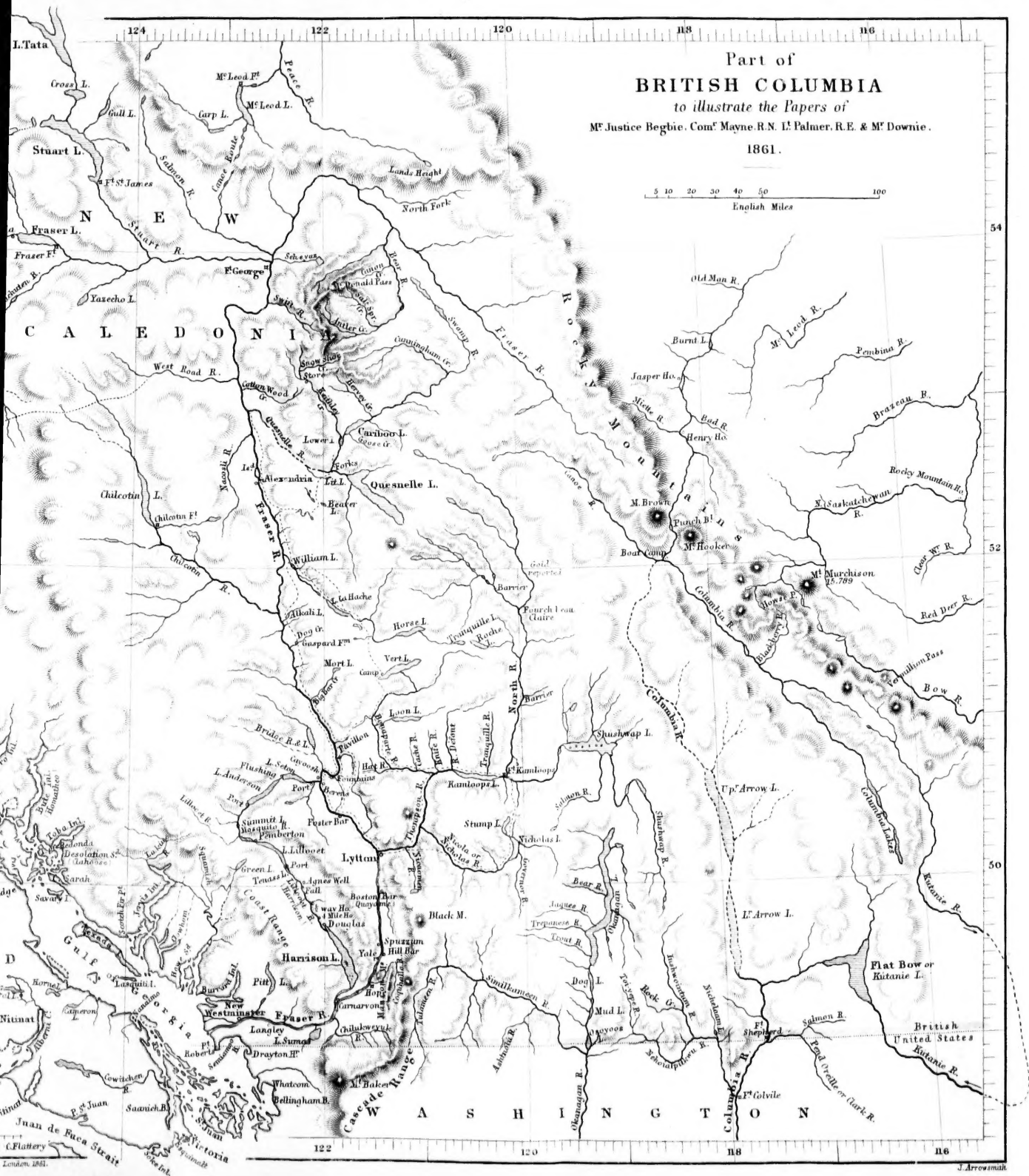








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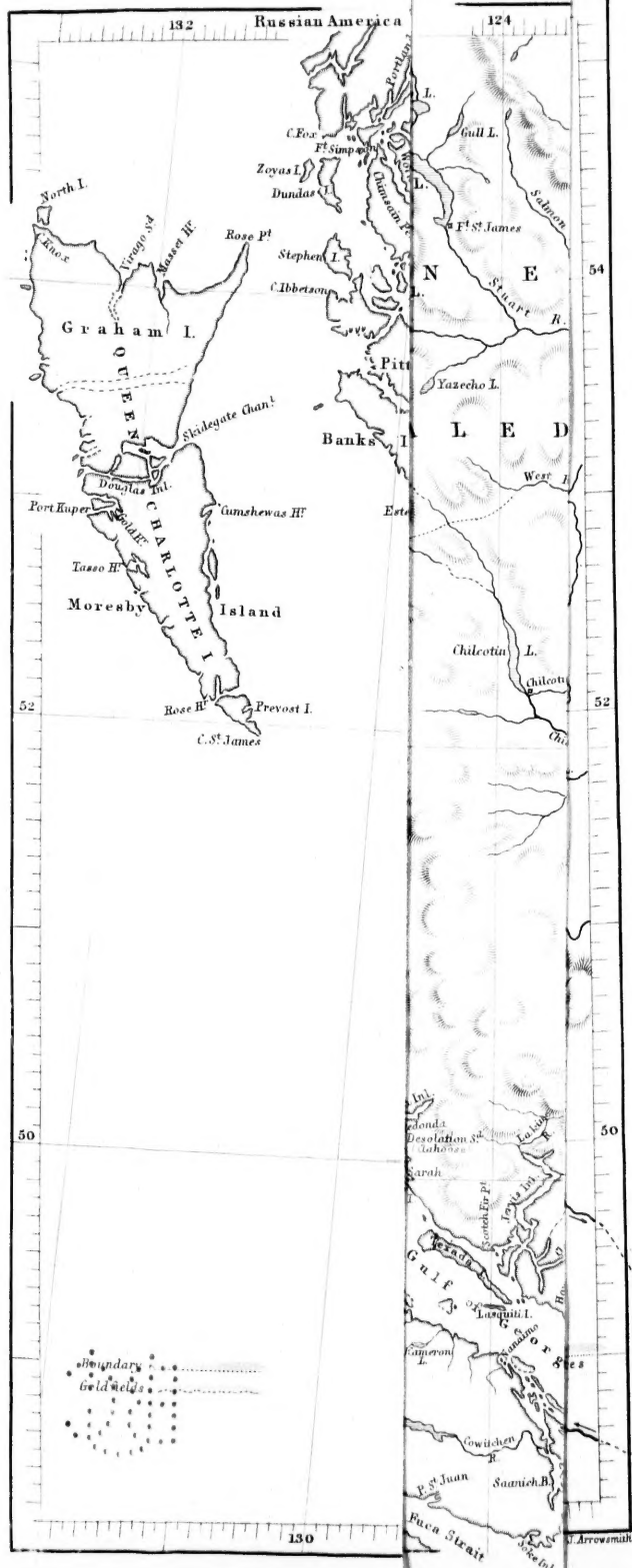
to illustrate the Papers of
M^r Justice Begbie, Com^r Mayne R.N. L^{ieut} Palmer, R.E. & M^r Downie.
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XVI.—*Report on a Journey in British Columbia in the Districts bordering on the Thompson, Fraser, and Harrison rivers.* By Lieut. RICHARD C. MAYNE, R.N.

Communicated by the ADMIRALTY.

Read, December 12, 1859.

Lieut. MAYNE to Capt. G. H. RICHARDS, R.N.

H.M.S. *Plumper*, Esquimalt, Vancouver Island,
July 7th, 1859.

SIR,

I have the honour to report that, in pursuance of your orders, I proceeded to Langley, and, taking the first steamer to Fort Hope, reached that place on the 23rd of April.

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I left Fort Hope on the 29th, and reached Fort Yale on the same evening.

The part of the Fraser River between Forts Hope and Yale is so well known that I need not speak of it, except perhaps to say that several rocks must be removed before it can be made reasonably safe for steam navigation.

We left Yale on the 2nd of May, and followed the river trail to Lytton, which we reached on the 7th.

The distance by trail from Yale to Lytton is about 60 miles, and the ground over which the trail passes is the roughest on which I have ever travelled, the greater part of it being over sharp pointed rocks or granite boulders. Some of the ascents in the Great Cañon, which is 6 miles long, are from 30° to 60°, and nearly perpendicular over the water. The current in the narrowest parts I estimated at 15 or 16 knots an hour. During the whole summer this part of the river is impassable for boats going up; and though some few people have come down it in safety, a great many have perished in the attempt.

There is hardly any land fit for cultivation between Lytton and Yale. There is a small flat at Spuzzum and several above Boston Bar, but they only average 200 or 300 yards long by 50 or 60 wide, and are almost all thickly timbered and covered with granite boulders. The largest one is about 9 miles below Lytton and is fenced in. It is about 1000 yards long by 400 yards wide, well covered with grass, but very sandy soil.

From Yale to Boston Bar the vegetation is limited to pine-trees and a few alders, wild onions and vetches growing among the rocks. Above Boston Bar it improves, and on the flats before-mentioned there are currants, cherries, gooseberries, and Oregon grasses in considerable quantities, and willows and maple in addition to the pine and alder.

About 2 miles above Boston Bar we found a bed of fine clay-slate running in an easterly direction, dip ranging from 5° to 40°, strike about 25°, and about 3 miles farther on we came to a bed of limestone, the only one we saw between Yale and Lytton. The surface was very small. With the exception of these two beds and a very small surface of clay-slate close to Spuzzum, we saw nothing but granite both in the mountains and in boulders of every shape and size, some at Wellington Bar being 10 or 15 tons weight.

There is a ferry at Spuzzum and another at Boston Bar. The former it is not necessary to cross travelling on foot, but the latter must be crossed to get to Lytton.

There are several "Restaurants" along the road (every place where anything can be got to eat is called a restaurant in this country), where tea, coffee, bread, bacon, and beans can be got, as well as a plank to sleep on; and these places are at such distances apart that no man possessed of any money need sleep out.

At Chapman and Boston Bars there are large stores belonging to the expressmen Messrs. Wells, Fargo, and Co., and Ballou.

The mule-trail leaves the river at Yale and meets it at Spuzzum, crosses it there, and again leaves it until reaching Lytton. It was blocked up by snow when I went up.

Lytton is at the forks of the Thompson and Fraser rivers on the south bank of the former and east of the latter, and is composed of eight or ten stores and a Government House. The site of the town is nearly 300 feet above the river on the upper of two benches, the lower of which is about 200 feet above the water. The bank on the opposite side of the Fraser is in three benches, the highest being about 600 feet, and the river is 576 feet wide at this season. The opposite bank of the Thompson is about the same height as Lytton. The Thompson River is about 150 yards wide at its mouth, and there is a horse-ferry across it for trains going to the Fountain, &c., &c. It is always blowing hard from north or south, the latter wind prevailing in summer, and the clouds of dust which continually sweep across the flat make it anything but a desirable spot for a residence.

We left Lytton for Kamloop, a post of the Hudson Bay Company, on the Thompson River, on the afternoon of the 9th of May, and followed the south bank of that river for 9 or 10 miles, when we ascended a steep hill for about $1\frac{1}{2}$ miles, and came to a valley extending about 10 miles to the eastward, well covered with grass and hemmed in by hills 700 or 800 feet high. From this point the aspect of the country became much more promising than the Valley of the Fraser. After traversing the whole length of this valley we went down upon the Nicola River, and fording it, followed its left bank till we came to the Nicola Lake.

The Nicola River is far prettier than any others I have seen in the country. It is very rapid and full of small islands and sandbanks, and winds along in reaches of about half-a-mile long. At each bend there is a flat of 5 or 6 acres of clear grass-land, which would be very valuable were they not constantly flooded in summer. In some places the banks are high enough to prevent this, but generally the soil does not appear to be so good as where the banks are low, and the rise of the river is so different in different years that it would require a residence of several summers to know which are flooded and which are not. Another great drawback to agriculture is a deposit of nitrate of soda, which, though we first noticed it here, appears more or less through all the country. Mr. McLean, the officer of the Hudson Bay Company, in charge of Fort Kamloop, told me that where it is in large quantities it destroys wheat, but that it has very little effect on vegetables.

Behind the flats the mountains rise from 500 to 1000 feet, but though some are bluffs of trap and sandstone, far the greater number are covered with grass nearly to their summits.

The banks of the Nicola are for the most part of clay, nearly perpendicular, and averaging about 20 feet high, but in some places they are 150 feet and in others only a few inches above the water even at this season, and lined with poplars and willows. The bed of the Nicola is much higher than that of the Thompson, there being about 1100 feet difference between the places where I left the latter and joined the former.

About 15 miles before coming to the Nicola Lake there is a valley extending to the northward, 5 or 6 miles wide. It is not quite level, but the soil appears good, though, like all this country, too sandy for an Englishman's notion of rich land. It is well covered with grass, and there are not more than ten or fifteen trees to an acre. The hills bounding it are from 700 to 1000 feet high. The Indians say there is a lake in it running nearly parallel with Nicola Lake.

The Nicola or Smeehâatlon lies nearly north and south, and is about 14 miles long by 1 to 2 wide. The banks are low and covered with grass on both sides. There is not much good land on the west side, but on the east there are two large valleys, with apparently good land in them, down which run the rivers Bodimon and McDonald. Granite here for a time supersedes the sandstone and trap, and at the north end of the lake on the west side there are some very steep cliffs of it.

After passing the Nicola Lake we went along a good place of prairie by the side of a chain of small lakes or ponds, which continues till it joins the Thompson nearly opposite Kamloop. Stump Lake, or Lake Hamea as it is called by the Indians, is the largest of this chain, and is about 6 miles long by 1 to $1\frac{1}{2}$ wide. After passing this, which is about 5 miles above Nicola Lake, we ascended Mount Skyetaken, at the top of which we were by the barometer 3600 feet above the level of the sea. This was the greatest height attained during our tour. The view from this mountain was very fine, extending as far as the Semilkamen Valley and Little O'Kanagan Lake, and showing a very large tract of grazing, if not farming, country. After crossing Skyetaken we passed a succession of low grassy hills, and descended to the Thompson River

opposite Fort Kamloop, and, crossing the river in a canoe, reached the fort about 10 o'clock A.M. on the 14th of May.

Fort Kamloop is situated at the forks of the Thompson and North rivers, on the north bank of the former and the west bank of the latter, and is one of the prettiest sites in the country. It is at the east end of a prairie about 10 miles long by 1 to 2 miles wide, which would be very valuable land were it not so low that it is always flooded in the summer. The year before last the fort itself was flooded so much that it had to be abandoned until the water fell.

The Thompson was about 300 yards wide at Kamloop when I was there, and the North River 320 yards. There is nothing of the rushing current here that there is in every other river we met, and in this river also lower down; and the contrast is so great as to give quite a sluggish appearance to the river, which quietly winds along about 3 knots an hour, though of course it must be much more in Midsummer.

Mr. McLean considers the soil here as good, though not so fine as at the head waters of the Thompson, about 22 miles east of this, or in the Semilkamen Valley, which he considers the best place in the colony for an agricultural settlement. The land about Fort Alexandria where he resided for several years, he also considers better than this, though more subject to frost. But I believe it is a great though common error to suppose that crops are destroyed nearly every year by frost at places even further north than Alexandria, once in four or five years being a fair average. Great quantities of potatoes are grown at the head of both Thompson and North rivers by the Indians, but nothing else has been tried. At Kamloop vegetables of all kinds thrive very well. A bushel of wheat there yields on an average 15 bushels. Mr. McLean says that at Alexandria he has known it yield 40.

There is considerable trade now carried on across the American frontier, and through Kamloop to the Fraser, and to the small rivers branching off from the Thompson, on nearly all of which there are or have been miners working. A great quantity of spirits and other things were smuggled into the country this way last year.

Gold has been found in the rivers Tranquille, Defont, Nicola, and Nicaomen, and silver in the latter, by Mr. McLean, and I believe he sent the first gold that was found in British Columbia from the last-named river. He assured me also that he had seen copper obtained by the Indians from a mine on the north bank of the Shushwap Lake, so pure that they made arrow-heads, pipe-stems, &c., of it.

There is a trail from this to Fort Hope which is always used by the servants of the Hudson Bay Company for transporting their goods to and from the northern parts. It is, however, dangerous in some parts, and a number of horses are lost each time the fur-brigade comes down. There is a bad swamp 7 or 8 miles long, and a steep mountain, Manson Mountain, both of which they have to cross. It takes them ten or fifteen days to go from Kamloop to Hope; but I am told that, travelling without luggage, it could be done in three or four days. A man has gone from Kamloop to Langley in five days.

The Indians all over the country suffered fearfully from want of food last winter, a great many dying of starvation. It was owing in a great measure to their improvidence, most of them leaving off the fishing, hunting, &c., last summer in the general mania for gold-digging, and making no provision for the winter. This state of things accounts for the number of thefts perpetrated on miners and others by them, their only choice in most cases being to steal or die. I think they can hardly be wondered at for preferring the former.

We left Kamloop for the Pavillon on the 17th May, and rode along the north bank of the Shushwap Lake as far as Tranquille River; after fording

Kamloops Lake

which we ascended a steep hill to the northward and opened about 3 miles of very nice grass-land, and then coming down again followed the lake to the copper-mine, at the foot of which we camped. It is in a bank of about 800 feet high that the copper is found, but we searched from top to bottom without finding any, though everything was coloured with it.

The road along the north side of Shuswap Lake is very rough, the hills sloping down to the edge of the lake. After about five hours' riding we reached the river Défont, across which we had to swim the horses, an undertaking which the force of the current makes both difficult and dangerous to perform, though the river is only 20 or 30 yards wide. The west bank of this river is about 250 feet high, on ascending which there is a grass plain 5 or 6 miles long, and from that to the River de la Cache is all good grazing-ground, and indeed I might almost say all the way to the Pavillon. There is a small stream two yards wide between the rivers Défont and De la Cache, which is dignified by the name of Conteaux River, and here we left the Thompson and turned a little northward, the river running away to the southward.

All the Thompson River from the Shuswap is very much like the Nicola, but larger and not so pretty. The soil near the River de la Cache is very good, but covered with soda. The river is small and shallow, but just above where it joins the Bonaparte being the best ford in that river makes it a good place for a revenue station, as the Bonaparte River must be crossed in going to either Fountain or Pavillon, except by going round to Lytton, where there is a magistrate.

We crossed the Bonaparte River on the morning of the 19th May, finding only 3 ft. 6 in. of water in the deepest part of the ford, which was an agreeable surprise, for we expected this to have been the worst of all the rivers as it was far the largest we crossed between Kamloop and Pavillon, and we had been told the deepest. We skirted along a steep hill on the north side of it, down which one of the pack-horses fell, though fortunately without injury, and we then came down again on the river. This hill would be avoided if the river were bridged, as the bridge would be thrown across higher up, where the trail crosses the stream in winter, but the river at this season is too deep for fording at that part. The valley of the Bonaparte is not quite so much covered with the nitrate of soda as the other valleys we passed through; indeed, neither the Bonaparte or Chapeau valleys contains so much of it as those of the Thompson and Nicola.

We followed the north bank of the Bonaparte for about 7 miles till we met the Chapeau River, from whence we followed the Chapeau for 12 miles, crossing the river several times. The Bonaparte turns northward after its junction with Chapeau to Lake Loon, in which I believe it takes its rise.

The Chapeau River is a remarkable one, though only 10 or 12 yards wide, inasmuch as it and the Thompson make an island of about 25 square miles of country, in the same way that the Nicola and Thompson make one of 40 square miles farther south. After leaving the Bonaparte it turns westward for about 12 miles, and then turns southward, joining the Fraser about 18 miles above Lytton. Its banks are from 20 to 60 feet high, and the valley averages 800 yards in width. Here the limestone commences, and from this to Lake Pavillon there is hardly anything else.

Leaving the Chapeau we turned north, and through a narrow valley between perpendicular limestone mountains 4000 to 5000 feet high, and came to a small lake (Crown), immediately beyond which is Lake Pavillon, which is about 6 miles long and $\frac{1}{4}$ of a mile wide. At the north end of this lake there is a most curious peak like a round tower, called by the Indians Skille Paa-lock; and about a mile farther on is a farm of about 20 acres, on which three Americans are at work. They had not tried grain when I was there, but said they thought the soil good. Four miles more along the north bank of the

Pavillon River, which runs from the Lake to the Fraser, brought us to the Pavillon itself.

The Pavillon is on the east bank of the Fraser, on a bench 600 feet above the river, very similar to that at Lytton. The wind blows and the dust flies in the same manner. There is one wooden house and several huts of canvas and boughs, which, like their log contemporaries in the Cañons, are called restaurants. Flour was 35 cents per lb. and bacon 75 when I was there. In the winter flour was as high as 85 cents, and bacon 1 dollar 50 cents.

The charges for carriage of goods, &c., now are from Pavillon to Kamloop 25 cents per lb.; to Fountain, 6; to Cayoush, 8; and to Big Bar, 8. From Lytton to Big Bar 30 cents. Big Bar is about 18 miles above Pavillon. Silver and copper have both been found at the Pavillon; the latter I have seen.

We left Pavillon on the 23rd of May, and walked by a very good trail to the Fountain. The Fountain, so called from a small fountain there, is a very much prettier and better site for a town than Pavillon: the latter, however, possessing the great advantage of limestone, none of which I saw at the Fountain, though I do not doubt there is some not far from it.

There is a considerable bend in the river at the Fountain, which shelters it to a considerable extent from the north and south winds. There are two or three large stores here, and some half-dozen log-huts scattered over the flat. There is a valley at the west end of the flat which extends southwards as far as Foster Bar, and through which there is a good trail.

About 3 miles below Fountain, on the opposite side of the Fraser, is Bridge River, where there is a large store belonging to Messrs. Fraser and Davis, who have thrown a wooden bridge about 40 yards long across the river, 800 yards from its mouth, for crossing which they make the miners pay 25 cents a head; they having, I am told, pulled down a bridge the Indians had made, and on which it was quite safe to cross. About $1\frac{1}{4}$ mile below this is French Bar, where there is a ferry, by which we crossed; and 2 miles farther, on the west bank of the river, is situated Cayoush.

Cayoush is at the junction of the Tukumeth and Fraser rivers, where the Harrison Lilloet route commences, and is the prettiest place I saw on the Fraser. Four or five huts, and the same number of stores, compose the town on the west side. On the east side the Hudson Bay Company are building a fort, to be called Fort Berens. It is to stand on the lowest of three benches, into which the bank is divided about 50 feet above the water. There is a ferry at Cayoush, and a trail on either side of the river to Lytton. The drawback to the one on the west side being that the Tukumeth is not always fordable. On the 24th May we again left the Fraser, and struck down the Harrison Lilloet route, and, following the Tukumeth, camped at the north end of Lake Seton, where there are a few huts for the boatmen who ply on the lake.

The following morning we crossed Lake Seton in four hours, and Lake Anderson the same afternoon in five. The two lakes are about the same size, and have much the same appearance, but Lake Anderson tends much more to the southward than the other. Both are bounded by steep mountains 3000 to 5000 feet high, and both are very deep. There is no perceptible current in them and hardly any rise and fall. Southerly is the prevailing wind, and it blows nearly always during the day, the morning and evening being calm. These lakes are separated by a neck of land $1\frac{1}{4}$ miles wide, which is nearly level, and through which runs a stream 20 or 30 yards wide. Port Anderson is at the south end of Lake Anderson. There is a large restaurant there for the entertainment of muleteers, &c., &c.

From Port Anderson to Port Pemberton is the Birkenhead Portage, or, as it is now generally called, the Mosquito Portage, which name it certainly well deserves. It is about 25 miles long by the trail, which is on the whole good.

There are regular trains of mules on both this and the next portage. When I was there they charged 8 cents per lb. for packing along this one, but in the winter it was 12 cents.

About 9 miles from Port Anderson is Summit Lake, which is a mile long, and from which the waters run north and south. It is about 800 feet above Port Anderson and 1800 feet above the sea. Half-way between ports Anderson and Pemberton there is a large bed of clay-slate nearly 2 miles long. There is a river, called the Scaarlux, running the whole length of this portage. The banks are low and covered with willows, &c., and many small streams run into it on both sides. The valley of the Scaarlux averages about 1500 yards in width, except at Port Anderson, where it is nearly 2 miles wide. It is bounded by mountains 1000 to 5000 feet high, and generally very steep. There were quantities of wild peas, lettuce, and berries on all the level spots. There are only two valleys of any size running off from it, one near Port Anderson on the east side, and the other near Port Pemberton on the west.

We reached Port Pemberton at 11 A.M. on the 27th. Port Pemberton is on the north bank of the Lilloet Lake, and contains half-a-dozen restaurants and huts occupied by muleteers and boatmen. There is a large flat on the lake opposite to it, which dries the whole way across in the winter, and goods have to be landed a quarter of a mile lower down, but at this season there is a passage wide enough for a boat to come up to a wharf which has been built abreast the town. About 2 feet is the extreme rise and fall on this lake, and there is never any perceptible current.

We left Port Pemberton at 3 o'clock the same afternoon, and arrived at Port Lilloet about 7:30 p.m. We were treated on our arrival there to the first rain that had fallen on the lake this year, and it continued all night. There is only one store and an old barn at Port Lilloet. We left Lilloet next morning for Port Douglas by what is called the Douglas Portage. There is a small lake, or rather a continuation of the larger one, for about 4 miles from Port Lilloet; and from the south end of this, Little Lilloet Lake as it is called, flows the Lilloet River, the mouth of which is at the Great Harrison Lake about a mile below Port Douglas. At this season the Lilloet River is entirely unnavigable, on account of several dangerous rapids, in one of which there is a fall of 10 or 12 feet, but in the winter considerable quantities of goods were brought up the river in canoes, with a great saving of expense to the merchants, the Indians charging 5 cents per lb. from Port Douglas to Port Lilloet, when the mule-trains were charging 15 cents.

Following the east bank of this river about 8 miles we came to the hot spring (St. Agnes' Well). The temperature of this spring is, I should think, about 160°, but the thermometer we had with us when we were there was only graduated to 120°, and it went up to that instantaneously. It flows in a small stream from the centre of a large knob of conglomerate rock (specimens of which I have sent among others to his Excellency the Governor) into a basin at the foot of the rock. I brought a bottle of it down with me, but the quantity was not sufficient for analysis.

We camped that night (29th) at the Akotzstar River, and reached Port Douglas at 3 P.M. next day.

We observed no new features on the Douglas Portage, and no limestone since leaving Pavillon.

The Lilloet River is very rapid, averaging 80 to 90 yards in width, but varying from 30 to 130 yards. There is a large stream called the Amockwa running into it from the southward about 9 miles below Port Lilloet, and another from the same direction called the Zoalkleen about 10 miles above Douglas. This latter is said to come from a lake called Zoalklinekt. The trail passes over many steep places which I think might have been avoided;

but as Lieut. S. Palmer, an officer of the Royal Engineers, is examining it more fully than I did, with a view to making alterations in the route, it is needless for me to make any remarks on this subject. The cedars on the side of the hill above Port Douglas are the finest I have seen in the country. I was told by a Frenchman that he had found gold-bearing quartz about 10 miles above Port Douglas.

Port Douglas is situated on a flat at the head of a small lake about a mile long, which is called Little Harrison Lake. In summer the water rises some distance over this flat; I am unable, however, to say how far, as the water was not at its highest when I was there; but even then some of the houses had two or three feet of water under or in them, according as they were built on piles or not.

Between the Little and the Great Harrison lakes there is a narrow passage nearly half-a-mile long. In summer there is sufficient water in it for the flat-bottomed steamers to go through, but in winter there are only four or five inches, and it is generally frozen over.

The Great Harrison is the largest of the chain of lakes. It is about 30 miles long and in some places 5 or 6 miles wide, in appearance much similar to the others. There are two large valleys on the E. side, one running E.S.E., and the other N.E. The latter is said to extend nearly to Lytton.

There is a stream running down it which I think takes its rise in the Cayoush Lake. At the entrance to the Great Harrison Lake there is a flat, which, like the small passage at its head, dries or nearly dries in winter, thereby blocking out steamers for at least seven months in the year; so that during the winter all goods have to be landed at the entrance of Harrison River, and taken up the lake in boats. This difficulty may be overcome, either by making a canal for the river steamers to pass through, or by making a road from the entrance of Harrison River to the south end of the Great Harrison Lake, and keeping a steamer inside the lake to carry the freight to Port Douglas; or it may be found better to cut a road from the Fraser River through the valley of the south end of the Great Harrison Lake, avoiding Harrison River and the flat altogether. One of these three things must be done if the Harrison Lilloet is to be the high road to British Columbia. It is thought that the opening of a road from Fort Hope to Boston Bar will cause the valley of the Fraser to be used for transporting goods into the interior; but I think this a mistake, except of course as far as the mining bars between Yale and Lytton are concerned. In the first place Lytton is not in so central a position with regard to the mining-regions as Cayoush, Fountain, or Pavillon. And the trail from Fountain to Lytton is much better from Boston Bar to that place.

Gold has now been found in large quantities at Alexandria, and from Pavillon there is a trail through a valley parallel to the Fraser, along which a waggon might be driven nearly the whole way.

There is gold in almost all the tributaries of the Thompson River also, and the road from Kamloop to Fountain or Pavillon is much better than between Lytton and Kamloop.

The country about Chilcoaten is, I am told, very good. A Canadian residing at Pavillon informed me he had travelled from Fort Chilcoaten to the lakes on Bridge River, through a valley parallel to the Fraser, and he knows an Indian who has been from thence to Port Douglas by a route leading down the valley east of the Lilloet; and both of these routes he describes as being over good land, and such as a road might be made on without great difficulty.

Between Fort Chilcoaten and the sea there is a chain of mountains through which there are two known passes, one by the West Road River, up which Sir A. McKenzie went, and the other at the head of Chilcoaten River, which

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has never yet been crossed by a white man. When Mr. McLean was at Fort Alexandria he received a letter from the *Beaver*, lying in North Bentinck Arm, in three days by the latter route.

The change of temperature is very remarkable in British Columbia. I have seen the thermometer at 31° at daylight in the shade, at noon the same day 85°, and 40° again in the evening. I append a table of meteorological observations taken during my tour, as well as those taken on board H.M.S. *Plumper* at the mouth of the river during the same period. The absence of animal life is also very remarkable. The only birds we saw were about half-a-dozen partridges, a few humming-birds, American robins, and one or two other species of small birds. There are rattlesnakes in the country, and the chief of the Shuswap Indians told me that his people were frequently killed by their bite; but we saw only one.

I have sent, according to your order, to his Excellency the Governor the geological specimens collected by Dr. Samuel Campbell. A small collection of plants made also by that officer has been given to Dr. Wood.

I cannot close this without expressing my sense of the great obligation I am under to Dr. Campbell, R.N., for his zealous and hearty co-operation on all occasions.

I have also to acknowledge with pleasure the great kindness I received at the hands of the gentlemen of the Hudson Bay Company wherever I met them.

ABSTRACT of BAROMETER, ATTACHED THERMOMETER, and TEMPERATURE
of the AIR.

Date.	Time.	Barometer.	Attached Therm.	Temp. of Air.	Date.	Time.	Barometer.	Attached Therm.	Temp. of Air.
1859. April					1859. April				
1	Noon	30·37	50	47	15	Noon	30·42	58	51
	Mid.	·37	49	44		Mid.	·22	58	46
2	Noon	30·43	54	48	16	Noon	30·20	62	48
	Mid.	·38	51	44		Mid.	·17	54	47
3	Noon	30·47	49	49	17	Noon	30·28	59	51
	Mid.	·45	52	43		Mid.	·13	55	43
4	Noon	30·46	59	53	18	Noon	30·16	59	49
	Mid.	·40	55	46		Mid.	·16	54	43
5	Noon	30·36	55	51	19	Noon	30·34	54	49
	Mid.	·17	53	41		Mid.	·34	51	38
6	Noon	30·13	59	51	20	Noon	30·30	55	52
	Mid.	·03	57	47		Mid.	·19	55	41
7	Noon	29·97	57	47	21	Noon	30·13	59	59
	Mid.	·78	53	47		Mid.	·08	56	44
8	Noon	29·76	55	48	22	Noon	30·04	59	56
	Mid.	·74	50	45		Mid.	·02	55	48
9	Noon	29·77	56	47	23	Noon	29·93	60	55
	Mid.	·67	47	43		Mid.	·86	57	45
10	Noon	29·63	48	45	24	Noon	29·86	51	54
	Mid.	·75	46	42		Mid.	·99	56	57
11	Noon	30·02	50	43	25	Noon	30·16	55	52
	Mid.	·04	43	32		Mid.	·19	56	50
12	Noon	30·15	53	42	26	Noon	30·22	54	50
	Mid.	·26	51	43		Mid.	·11	54	47
13	Noon	30·48	58	45	27	Noon	30·03	52	50
	Mid.	·53	53	46		Mid.	29·99	51	44
14	Noon	30·62	59	48	28	Noon	30·08	52	47
	Mid.	·57	57	48		Mid.	·08	57	45

ABSTRACT OF BAROMETER, &c.—continued.

Date.	Time.	Barometer.	Attached Therm.	Temp. of Air.	Date.	Time.	Barometer.	Attached Therm.	Temp. of Air.
1859.					1859.				
April					May				
29	Noon	30·06	54	49	26	Noon	30·25	62	64
	Mid.	29·93	53	47		Mid.	·03	59	54
30	Noon	29·96	56	51	27	Noon	29·98	64	62
	Mid.	·94	53	41		Mid.	·87	61	56
May					28	Noon	29·90	60	55
1	Noon	29·92	59	53		Mid.	·91	56	53
	Mid.	·93	56	53	29	Noon	29·99	49	52
2	Noon	29·85	64	60		Mid.	·98	57	51
	Mid.	·88	58	50	30	Noon	29·95	60	57
3	Noon	29·95	63	58		Mid.	30·10	57	50
	Mid.	30·08	58	51	31	Noon	30·40	61	54
4	Noon	30·31	59	50		Mid.	·40	56	49½
	Mid.	·28	53	45	June				
5	Noon	30·13	54	58	1	Noon	30·35	59	57
	Mid.	29·93	58	57		Mid.	·15	59	55
6	Noon	29·90	55	55	2	Noon	30·10	59	57
	Mid.	·94	57	52		Mid.	29·96	61	57
7	Noon	29·92	60	57	3	Noon	29·97	66	65
	Mid.	·78	55	49		Mid.	·86	64	61½
8	Noon	30·85	57	52	4	Noon	30·22	65	63
	Mid.	·04	52	46		Mid.	·38	60	52
9	Noon	30·15	60	49	5	Noon	30·28	60	58
	Mid.	·15	56	45		Mid.	·04	57	54
10	Noon	30·18	58	48	6	Noon	30·22	54	54
	Mid.	·12	52	44		Mid.	·27	56	52
11	Noon	30·30	58	52	7	Noon	30·24	57	57
	Mid.	·42	57	50		Mid.	·34	57	56
12	Noon	30·54	62	58	8	Noon	30·38	62	61
	Mid.	·45	59	51		Mid.	·09	61	57
13	Noon	30·02	69	64	9	Noon	29·98	62	63
	Mid.	·15	63	53		Mid.	·87	66	62
14	Noon	30·14	71	68	10	Noon	30·01	71	67
	Mid.	·06	63	57		Mid.	·03	65	60
15	Noon	30·15	63	67	11	Noon	30·11	62	59
	Mid.	·10	64	59		Mid.	·06	66	59
16	Noon	29·99	60	57	12	Noon	30·12	59	56
	Mid.	·00	59	54		Mid.	·02	60	55
17	Noon	30·10	63	63	13	Noon	30·15	63	59
	Mid.	·02	61	55		Mid.	·18	58	52
18	Noon	30·10	58	59	14	Noon	30·18	64	60
	Mid.	·22	57	57		Mid.	·02	59	54
19	Noon	30·31	62	58	15	Noon	29·99	57	55
	Mid.	·26	60	50½		Mid.	·99	60	57
20	Noon	30·33	64	59	16	Noon	30·15	65	55
	Mid.	·29	60	52		Mid.	·18	61	54
21	Noon	30·18	65	59	17	Noon	30·28	60	60
	Mid.	·05	66	50		Mid.	·15	61	52
22	Noon	30·05	56	55½	18	Noon	30·15	58	58
	Mid.	29·92	55	48		Mid.	·05	60	55
23	Noon	30·15	60	52½	19	Noon	30·25	61	59
	Mid.	·28	54	47		Mid.	·35	58	52
24	Noon	30·50	61	55	20	Noon	30·38	64	58
	Mid.	·51	58	49		Mid.	·23	58	56
25	Noon	30·52	64	56					
	Mid.	·39	59	51					

METEOROLOGICAL OBSERVATIONS taken in BRITISH COLUMBIA during the Months of APRIL and MAY, 1859.

Attached Therm.	Temp. of Air.	Barometer and Thermometer attached.				Thermometer.				Remarks, Place, &c.
		6 A.M.	Noon.	5 P.M.	10 P.M.	6 A.M.	Noon	5 P.M.	10 P.M.	
62	64									
59	54									
64	62									
61	56	° °	° °	° °	° °					
60	55	.. ..	.. ..	.. ..	30.11 .65	..	..	..	..	Weather very fine; at Langley, Fraser River.
56	53	30.10 67	.. ..	.. ..	.. ..	..	..	..	..	Fine night; overcast.
49	52	.. ..	.. ..	.. ..	.. ..	..	..	..	..	Fine.
57	51	.. ..	.. ..	.. ..	.. ..	..	..	..	..	Ditto; at Fort Hope.
60	57	.. ..	29.54 61	.. ..	29.71 58	..	54	..	54	Ditto; force of wind 4.6.
57	50	29.86 51	.. ..	.. ..	29.97 54	51	54	..	54	Cloudy; slight showers, &c.
61	54	.. ..	29.97 56	29.97 57	29.98 57	..	54	54	47	Cloudy.
56	49½	29.79 56	29.75 56	29.78 57	.. ..	58	60	51	47	Ditto.
		29.83 53	29.83 53	29.85 56	29.86 53	45	50	48	38	Ditto; slight showers.
		29.87 53	.. ..	29.50 50	29.53 53	45	50	48	38	Very fine.
		29.57 54	29.57 54	29.61 63	.. ..	45	50	48	38	Cloudy; Fort Yale, F. R.
59	57									
59	55									
59	57									
61	57	29.51 51	29.52 61	29.53 62	.. ..	51	60	53	50	Fine; at Fort Yale.
66	65	29.47 40	29.47 81	.. ..	.. ..	40	85	50	48	Very fine.
64	61½	29.60 54	29.76 62	29.72 61	29.73 57	53	63	61	54	Ditto; at Ferryhouse, F. R.
65	63	29.72 47	29.36 65	29.08 73	29.98 59	41	69	60	50	Ditto; passing along river.
60	52	28.87 51	29.47 77	29.13 74	29.07 58	45	73	74	56	Ditto; Therm. in sun 84°; at Boston Bar.
60	58	29.02 51½	.. ..	.. ..	28.78 57	50	.. ..	.. ..	52	Ditto; ditto 80°.
57	54	28.47 51	.. ..	.. ..	.. ..	50	64	48	44	Ditto; force of wind 3.5.
54	54	29.02 44	29.07 54	29.21 61	29.06 47	40	61	54	42	Ditto ditto.
56	52	29.11 44	26.50 64	27.72 50	27.70 48	43	64	50	37	Fine; Lytton, F. R.
57	57	27.75 48	28.04 65	27.85 60	27.85 55	30	65	55	55	Ditto ditto.
57	56	27.92 43	27.97 64	27.42 60	27.81 48	42	70	63	40	Weather fine; passing along the Nicola River.
62	61	27.80 41	27.40 65	26.25 70	26.65 44	30	79	70	45	Ditto.
61	57	26.60 40	28.62 72	28.58 66	26.65 44	32	72	65	50	Ditto; on top of Skytakew-hill, near Fort Thompson.
62	63	28.88 46	28.53 80	.. ..	28.44 68½	46	76	70	68	Ditto; at Fort Kamloop or Thompson.
66	62	28.28 69	28.26 73	28.35 62	28.50 58	65	70	50	50	Ditto.
71	67	28.65 65	27.69 72	27.62 72	28.42 62	65	73	60	58	Ditto.
65	60	28.41 58	28.44 77	28.11 63	28.19 55	48	82	56	50	Ditto; at Lake Shnewap.
62	59	28.17 39	27.61 69	27.10 67	27.10 56	34	80	56	53	Ditto; therm. in sun 127° at noon.
66	59	27.11 49	27.71 73	28.46 73	28.28 62	48	80	67	64	Ditto.
59	56	28.21 58	28.17 73	28.17 79	28.10 60	60	80	73	60	Ditto; force of wind 4.6.
60	55	28.14 53	28.06 71	28.09 55	28.25 55	51	75	58	55	Ditto; slight showers, &c.
60	55	28.09 49	28.70 67	28.60 63	29.25 55	40	68	63½	59	Cloudy; slight showers, &c.
63	59	29.49 53	29.84 67	29.55 72	29.54 57	52	70	67	55	Very fine.
58	52	29.54 55	27.32 80	29.15 60	29.15 58	55	80	72	60	Therm. in sun 90°.
64	60	29.17 55	29.02 70	28.24 67	28.08 59	55	70	65	59	Passing along the Harrison and Lilloet Trail.
59	54	28.00 51	29.06 72	28.90 63	28.89 61	50	72	68	61	A.M., fine; P.M., very rainy.
57	55	28.83 56	28.88 62	29.21 57	.. ..	56	65	60	58	Cloudy; slight showers.
60	57	29.28 53	29.42 60	29.77 59	29.75 57	53	60	55	53	Ditto ditto.
65	55	.. ..	29.67 56	29.74 53	29.82 52	53	60	55	52	Heavy squalls of rain; at Port Douglas.
61	54	29.92 48	3.12 59	30.21 53	30.17 49	49	60	53	49	Fine; at Harrison Lake.